

## RED RIVER OF THE NORTH BASIN--Continued

05076000 THIEF RIVER NEAR THIEF RIVER FALLS, MN

LOCATION.--Lat 48°11'08", long 96°10'11", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 3, T.154 N., R.43 W., Marshall County, Hydrologic Unit 09020304, on right bank, 0.2 mi upstream from highway bridge, 5 mi north of Thief River Falls, 7 mi upstream from mouth, and 9 mi downstream from Mud Lake National Wildlife Refuge.

DRAINAGE AREA.--985 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1909 to September 1917, April 1920 to September 1921, October 1922 to September 1924, October 1928 to September 1981, March 1982 to current year. Monthly discharge only for some periods, annual maximums for water years 1919, 1922, 1925, 1926, published in WSP 1308. October 1981 to February 1982, operated as a high-flow partial-record station.

REVISED RECORDS.--WSP 925: Drainage area. WSP 1308: 1917(M), 1924(M), 1929(M), 1931-33(M), 1935(M), 1937(M).

GAGE.--Water-stage recorder and control of grouted boulders. Datum of gage is 1,112.33 ft above sea level (NGVD of 1929, levels by Minnesota Department of Transportation). Prior to May 4, 1939, nonrecording gages at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation by Thief and Mud Lakes.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	223	e93	e2.2	0.62	e1.3	e52	62	521	2370	1190	536
2	117	233	e90	e2.2	0.55	e1.2	e40	51	411	2280	1140	554
3	118	224	e88	e2.1	0.47	e1.1	e28	44	324	2190	1130	518
4	93	212	e87	e2.1	0.36	e0.58	e21	41	267	2120	1120	498
5	86	206	e86	e2.1	0.26	e0.58	e16	38	249	2080	1070	470
6	83	200	e45	e2.1	e0.36	e0.66	e14	51	289	2020	917	455
7	83	197	e45	e2.2	e0.39	0.13	e12	69	275	2000	887	444
8	80	191	e45	e2.2	e0.46	0.10	e13	96	322	2040	809	435
9	32	189	e45	e2.3	0.52	0.16	e14	313	1180	2100	792	432
10	26	188	e45	e2.4	0.56	e0.38	e15	449	3350	2330	755	375
11	26	181	e45	e2.4	0.58	e0.46	e20	379	3350	2570	745	375
12	26	177	e45	e2.5	0.72	1.4	e32	305	3260	2470	701	370
13	27	174	e45	e2.4	0.80	e1.7	e48	273	3260	2300	545	284
14	29	172	e45	e2.3	1.4	e2.1	e90	252	3190	2160	503	193
15	37	193	e45	e2.2	e1.5	e2.5	e85	223	3110	2050	383	181
16	38	488	e45	e2.1	e1.6	e2.9	50	206	3020	1970	371	187
17	34	743	e45	e2.1	e1.7	e4.0	43	191	2880	1900	368	182
18	32	736	e45	e2.0	e1.9	e7.1	64	151	2680	1850	360	147
19	31	649	e15	e1.9	e2.3	e4.6	104	133	2650	1810	372	116
20	27	426	e6.0	e1.9	e3.3	e3.6	102	125	2930	1760	416	100
21	26	392	e4.6	e1.8	e2.5	e3.0	67	122	2990	1730	412	47
22	26	146	e3.8	e1.8	e2.0	e3.2	47	108	3040	1690	408	36
23	30	103	e3.2	e1.7	e1.7	e3.6	36	55	3240	1650	405	30
24	71	104	e2.8	e1.6	e1.6	e3.7	64	51	3250	1610	400	30
25	63	104	e2.6	e1.6	e1.6	e3.9	119	50	3190	1580	397	26
26	132	66	e2.5	e1.5	e1.6	e4.3	97	46	3070	1550	392	24
27	159	e65	e2.4	e1.5	e1.5	e5.4	63	43	2920	1490	389	22
28	191	e100	e2.3	1.4	e1.5	e40	50	44	2790	1460	418	25
29	188	e98	e2.3	1.1	---	e55	44	169	2640	1420	427	21
30	180	e96	e2.2	0.93	---	e60	71	483	2490	1340	437	21
31	184	---	e2.2	0.78	---	e57	---	569	---	1250	493	---
TOTAL	2405	7276	1080.9	59.41	34.35	275.65	1521	5192	67138	59140	19152	7134
MEAN	77.6	243	34.9	1.92	1.23	8.89	50.7	167	2238	1908	618	238
MAX	191	743	93	2.5	3.3	60	119	569	3350	2570	1190	554
MIN	26	65	2.2	0.78	0.26	0.10	12	38	249	1250	360	21
AC-FT	4770	14430	2140	118	68	547	3020	10300	133200	117300	37990	14150
CFSM	0.08	0.25	0.04	0.00	0.00	0.01	0.05	0.17	2.27	1.94	0.63	0.24
IN.	0.09	0.27	0.04	0.00	0.00	0.01	0.06	0.20	2.54	2.23	0.72	0.27

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	94.9	85.6	24.7	5.73	5.36	78.0	619	506	340	255	120	117
MAX	637	1019	215	100	101	773	2827	4274	2238	2103	1130	1619
(WY)	1986	2001	1999	1910	1998	1995	1966	1950	2002	1975	2001	1999
MIN	0.000	0.000	0.000	0.000	0.000	0.000	7.75	1.83	0.032	0.000	0.000	0.000
(WY)	1911	1911	1911	1911	1911	1930	1981	1990	1980	1932	1932	1929

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1909 - 2002

ANNUAL TOTAL	162693.1	170408.31	
ANNUAL MEAN	446	467	187a
HIGHEST ANNUAL MEAN			791 1999
LOWEST ANNUAL MEAN			1.28 1939
HIGHEST DAILY MEAN	3400 Apr 9	3350 Jun 10,11	5580 May 13 1950
LOWEST DAILY MEAN	2.2 Dec 30	0.10 Mar 8	0.00b Oct 1 1910
ANNUAL SEVEN-DAY MINIMUM	2.4 Dec 25	0.35 Mar 5	0.00 Oct 1 1910
MAXIMUM PEAK FLOW		3410 Jun 10	5610 May 13 1950
MAXIMUM PEAK STAGE		14.55 Jun 10	17.38 May 13 1950
INSTANTANEOUS LOW FLOW		0.07 Mar 7	
ANNUAL RUNOFF (AC-FT)	322700	338000	135700
ANNUAL RUNOFF (CFM)	0.45	0.47	0.19
ANNUAL RUNOFF (INCHES)	6.14	6.44	2.58
10 PERCENT EXCEEDS	1340	1980	582
50 PERCENT EXCEEDS	198	80	10
90 PERCENT EXCEEDS	3.8	1.6	0.00

a Median of annual mean discharges is 146 ft<sup>3</sup>/s.  
 b Many days, several years.  
 e Estimated.

